

ABSTRACT OF THE DISCLOSURE

A system is provided for positioning separate portions of a sample in elongate, parallel channels of a sample chamber and for irradiating a sample in the chamber to create a diffraction pattern where the sample and chamber differ in refractive index. The system also can measure absorption of electromagnetic radiation by a sample in the chamber, and can measure the absorption simultaneously with measurement of diffraction by the sample.

10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270
280
290
300
310
320
330
340
350
360
370
380
390
400
410
420
430
440
450
460
470
480
490
500
510
520
530
540
550
560
570
580
590
600
610
620
630
640
650
660
670
680
690
700
710
720
730
740
750
760
770
780
790
800
810
820
830
840
850
860
870
880
890
900
910
920
930
940
950
960
970
980
990
1000

25

30

35